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the enamel of the bottom teeth. Each optical output preferably is connected to a distal light source by two glass or plastic fiber optic bundles which originate at the distal light source, enter the device through a socket 20 and terminate at the trifurcated linear output window. Non-uniformity in fiber transmission is generally observed to be minor in the absence of actual breaks in the fibers. Variation in optical output from point to point at the surface of each output or emitter should be no more than about $\pm 10\%$.

IN THE CLAIMS:

Please cancel claims 2, 3, 4, and 5.

Please amend the following claims in the manner indicated:

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1. (Amended) An assembly comprising:
a light base having a concave curved surface forming an archway interior space; and
a plurality of light-generating devices positioned on said light base to shine light into said archway space, each of which is arranged to output light in a lobe that overlaps light lobes of other devices, to form a combined field of light from said plurality of light-generating devices, such that the combined field of light results in light output of substantially uniform intensity of about 10 to about 300 milliWatt/cm² in said archway space at a distance of about one-half to about 3 inches from said concave curved surface.

52
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6. (Amended) The assembly of claim 1 where said substantially uniform light intensity is achieved through directing of said lobes by means of any one or more of the following: individual lenses integrally associated with said light-generating devices; individual lenses positioned in proximity of said light-generating devices; a light-transmitting membrane that includes lenses, positioned in front of said light-generating devices; perturbations in said curved surface that cause said light generating means to be angled; precisely forming said curved surface, interposing pedestals between said light-generating means and said concave curved surface.

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Page 4 of 17 (Response To 17 August 2001 Office Action -February 15, 2002)

a5

8. (Amended) The assembly of claim 1 where said substantially uniform light intensity is achieved through digital or analog control of electrical energy that powers each of said light-generating devices.

9. (Amended) The assembly of claim 1 where said substantially uniform light intensity is achieved through use of light-generating devices of different sizes.

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16. (Amended) The assembly of claim 14 where said light-generating devices and their associated lenses direct their lobes at differing angles with regard to their respective positions on said light base.

19. (Amended) The assembly of claim 1 where said plurality of light-generating devices are positioned on said light base in a uniform spatial pattern.

20. (Amended) The assembly of claim 1 where said light-generating devices are light emitting diodes that are affixed on said light base.

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21. (Amended) The assembly of claim 1 where said light-generating devices are light emitting diodes that are manufactured on a surface that is coupled to said light base.

22. (Amended) The assembly of claim 1 where said light-generating devices are light emitting diodes that are grown on a surface that is coupled to said light base.

23. (Amended) The assembly of claim 1 where said light-generating devices are light emitting diodes that are grown on said light base.

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27. (Amended) The assembly of claim 20 further comprising passages in said light base that allow air to flow through said passages.

28. (Amended) The assembly of claim 27 further comprising means for drawing air through said passages in a direction opposite to the direction of light output of said light emitting diodes.

29. (Amended) The assembly of claim 1 further comprising positioning means coupled to said light base for placing said assembly so that said concave curved surface is at a preselected position relative to the teeth of a patient.

31. (Amended) The assembly of claim 29 where said positioning means is a bite block.

34. (Amended) The assembly of claim 33 where said pair of light sources are positioned and directed to form two light beams that meet at a point that is at a predetermined distance from said concave curved surface.

35. (Amended) The assembly of claim 1 where said light base is constructed of a material that is flexible, to allow changing curvature of said curved surface.

36. (Amended) The assembly of claim 1 further comprising a light blocking attachment coupled to said light base.

37. (Amended) The assembly of claim 36 where said light blocking attachment is adapted to block light in the wavelength range of said light sources.

38. (Amended) An assembly for placing in front of a patient's teeth when used in connection with whitening teeth comprising:

a light base having a generally concave curved surface; and,

a plurality of light-generating devices positioned on said surface, each of which is arranged to output light in a lobe such that light output of substantially uniform intensity of about 10 to about 300 milliWatt/cm² is generated at a distance of about one-half to about three inches from said concave surface.

39. (Amended) The assembly of claim 38 where said light-generating devices produce a blue light.

40. (Amended) The assembly of claim 38 where said light is approximately centered at 475 nm.

41. (Amended) The assembly of claim 38 where said light-generating devices are LEDs that product a blue light.

42. (Amended) The assembly of claim 38 where said lobes of said light-generating device overlap at said teeth.

43. (Amended) An assembly comprising:

a light base; and,

a plurality of light-generating devices positioned on said light base, each of which is arranged to generate a lobe of light, said lobes combining such that light output of substantially uniform intensity of about 10 to about 300 milliWatt/cm² is generated on a surface at a distance of about one-half to about three inches from said light-generating devices.

44. (Amended) The assembly of claim 43 where said lobes of light overlap to form a field of light that is approximately the size of one tooth.

45. (Amended) The assembly of claim 43 where said lobes of light overlap to form a field of light that uniformly covers a number of teeth.

46. (Amended) The assembly of claim 43 where said lobes of light overlap to form a field of light that uniformly and concurrently covers upper eight and lower eight teeth of a patient.

47. (Amended) The assembly of claim 43 where said light-generating devices generate light in the blue range.